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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,674	06/18/2001	Thomas J. Nosella	CISCP185	1033
22434	7590	02/13/2006	EXAMINER	
BEYER WEAVER & THOMAS LLP			HO, DUC CHI	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2665	

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/883,674

Applicant(s)

NOSELLA ET AL.

Examiner

Duc C. Ho

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed on 12-22-05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36 is/are allowed.
- 6) ☒ Claim(s) 1-35, and 37-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Drawings

1. Figures 1-4B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-35, and 37-44 are rejected under 35 U.S.C. 102(b) as being anticipated by the Admitted Prior Art in figures 1-4B of the instant application (see pages 2-5), hereinafter referred to as APA.

Regarding claim 1, the APA in figure 1 discloses a Cisco hot standby router protocol (HSRP), see pages 1-2.

receiving an address resolution protocol (ARP) message from a host addressed to an address shared by a plurality of gateway devices to act as the addressee gateway devices available for serving the hosts on the network segment (the GW1-110a, fig.1, a primary member of the RG108 receives an ARP message from the host 120a addressed to a virtual MAC address 118, and a virtual IP address 116 shared by a plurality of gateway devices 110a-d to act as a default gateway for serving the hosts 120a-c on the sub network 130, see pages 2-3);

in response to the received ARP message, and based on load balancing considerations, selecting one of the plurality of gateway devices to act as the addressee gateway device for the host (in response to the received ARP message, and based on pre-configured priorities for load balancing configuration, the primary member GW1-110a, fig. 1 is selected to act as the addressee gateway device for the host); and

replying to the ARP message with a reply message identifying the selected addressee gateway device (The primary member 110a of the RG 108 responds with a reply message by inherently identifying its virtual MAC address 118-fig. 1 as default gateway services for all hosts 120s, see page 3).

Regarding claim 2, the gateway devices 110a-d are the multiple routers, which are layer 3 devices.

Regarding claim 3, the address 116 or VIP:10.0.0.100-fig. 1 is a virtual IP address.

Regarding claim 4, the reply message of the ARP request identifies the gateway device 110a with its VMAC address 118-fig.1 as a layer-2 address.

Regarding claim 5, the layer 2 address 118-fig.1 for the default gateway device 110a is a VMAC or a virtual MAC address.

Regarding claim 6, the APA in page 3 of the instant application discloses that if the primary member 110a of the RG 108 should fail as shown in figure 2, a secondary member 110b will assume the VMAC and VIP address 118,116, and effectively becoming the primary

member and thereby providing uninterrupted gateway services to the hosts 120a-c of the common subnet 130-fig.2.

Regarding claim 7, the secondary member 110b-fig. 2 is redistributed as the primary gateway responsible for any hosts for which the failed gateway device had been serving as the primary gateway device.

Regarding claims 10-16, these claims have similar limitations as claims 1-7, respectively. Therefore, they are rejected under the APA in figures 1-2 for the same reasons set forth in the rejection of claims 1-7.

Regarding claims 26-31 and 44, these claims have similar limitations as claims 1-7, respectively. Therefore, they are rejected under the APA in figures 1-2 for the same reasons set forth in the rejection of claims 1-7.

Regarding claims 37-43, these claims have similar limitations as claims 1-7, respectively. Therefore, they are rejected under the APA in figures 1-2 for the same reasons set forth in the rejection of claims 1-7.

Regarding claim 19, please see the rejection of claim 1. The APA of the instant application in page 2 discloses all claimed limitations, in which the actual component devices such as: a memory, a network interface, and a processor configured to perform the claimed limitations are shown in figure 1 of the patent 5,473,599.

Regarding claims 20-25, these claims have similar limitations as claims 2-7, respectively. Therefore, they are rejected under the APA in figures 1-2 for the same reasons set forth in the rejection of claims 2-7.

Regarding claim 8, the APA in figure 1 discloses a Cisco hot standby router protocol (HSRP), see pages 1-2.

receiving an ARP message from a host (the GW1-110a, fig. 1, a primary member of the RG108 receives an ARP message from the host 120a, see pages 2-3);

in response to the received ARP message, and based on load balancing considerations, selecting a gateway device, from among a group of available gateway devices available for servicing hosts on the network segment, to act as the addressee gateway device for the host that sent the ARP message (in response to the received ARP message, and based on pre-configured priorities for load balancing configuration, the primary member GW1-110a, fig. 1 is selected to act as the addressee gateway device for the host, see pages 2-3);

replying to the ARP message with a reply message identifying the addressee gateway device (The primary member 110a of the RG 108 responds with a reply message by inherently identifying its virtual MAC address 118-fig. 1 as default gateway services for all hosts 120s, see page 3);

determining that one of the available gateway devices has failed; and

taking over responsibility for gateway services of the failed gateway device (the APA in page 3 of the instant application discloses that if the primary member 110a of the RG 108 should fail as shown in figure 2, a secondary member 110b will assume the VMAC and VIP address 118,116, and effectively becoming the primary member and thereby providing uninterrupted gateway services to the hosts 120a-c of the common subnet 130-fig.2).

Regarding claim 9, the gateway devices 110a-d are the multiple routers, which are layer 3 devices.

Regarding claims 17-18, and 32-33, these claims have similar limitations as claims 8-9, respectively. Therefore, they are rejected under the APA in figures 1-2 for the same reasons set forth in the rejection of claims 8-9.

Regarding claims 34-35, these claims have similar limitations as claim 8, respectively. Therefore, they are rejected under the APA in figures 1-2 for the same reasons set forth in the rejection of claim 8.

Allowable Subject Matter

4. Claim 36 is allowed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

A handwritten signature in black ink, appearing to read "Duc Ho", written over the printed name.

Duc Ho
02-06-06